

Peer Reviewed Publications, Univ.-Prof. Dr. Andrii V. Chumak

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Researcher ID: <http://www.researcherid.com/rid/N-1395-2013>
Google Scholar: <https://scholar.google.de/citations?user=h8XwXewAAAAJ&hl=en>
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Book chapters: 3
Invited reviews: 11
Peer reviewed articles: 114 (+4 submitted)
Number of patents: 1
Contributions (presenting): 135 (67 invited talks and lectures, 28 invited seminars)
Scopus: h-index = 49, 1482 citations in 2023, 11.497 in total

Book Chapters

1. *Magnon spintronics: Fundamentals of magnon-based computing*
A. V. Chumak
In: [Spintronics Handbook: Spin Transport and Magnetism](#), Second Edition,
E. Y. Tsymlal and I. Žutić (eds.), CRC Press, Boca Raton, Florida), Chapter 6, pp. 247-302, (2019)
ISBN 9781498769723 - CAT# K29316
2. *Magnon spintronics*
A.D. Karenowska, A.V. Chumak, A.A. Serga, and B. Hillebrands in [Handbook of Spintronics](#),
Y. Xu, D.D. Awschalom, J. Nitta (eds.), Springer, pp. 1505-1549 (2015)
ISBN 978-94-007-6891-8
3. *The dynamic magnonic crystal: New horizons in artificial crystal based signal processing*
A.V. Chumak, A.D. Karenowska, A.A. Serga, and B. Hillebrands
In: Topics in Applied Physics, Vol.125: [Magnonics From Fundamentals to Applications](#),
S.O. Demokritov and A.N. Slavin (eds.), Springer, pp. 243-255 (2012)
ISBN 978-3-642-30247-3

List of Submitted Articles

- *Fast switchable unidirectional magnon emitter*
Y. Wang, M. Guo, K. Davidková, R. Verba, X. Guo, C. Dubs, A. V. Chumak, P. Pirro, Q. Wang
[arXiv:2410.01511](https://arxiv.org/abs/2410.01511)
- *Magnonic inverse-design processor*
N. Zenbaa, C. Abert, F. Majcen, M. Kerber, R. Serha, S. Knauer, Q. Wang, T. Schrefl, D. Suess,
A. Chumak
[arXiv:2403.17724](https://arxiv.org/abs/2403.17724)

- *Plasmon-enhanced Brillouin Light Scattering spectroscopy for magnetic systems. I. Theoretical Model*
V. Lozovski, A. V. Chumak
[arXiv:2404.14528](https://arxiv.org/abs/2404.14528)
- *Plasmon-enhanced Brillouin Light Scattering (BLS) spectroscopy for magnetic systems. II. Numerical simulations*
Y. Demydenko, T. Vasiliev, K. O. Levchenko, A. V. Chumak, V. Lozovski
[arXiv:2404.14535](https://arxiv.org/abs/2404.14535)

List of Accepted Peer-Reviewed Articles

List of Published Peer Reviewed Articles

1. *Unidirectional propagation of zero-momentum magnons*
O. Wojewoda, J. Holobrádek, D. Pavelka, E. Pribytova, J. Krčma, J. Klíma, J. Michalička, T. Lednický, A. V. Chumak, M. Urbánek
[Appl. Phys. Lett. 125, 132401 \(2024\)](https://doi.org/10.1063/5.0218478) DOI: 10.1063/5.0218478
2. *All-magnonic repeater based on bistability*
Q. Wang, R. Verba, K. Davidkova, B. Heinz, S. Tian, Y. Rao, M. Guo, X. Guo, C. Dubs, P. Pirro, A.V. Chumak
[Nat. Comm. 15, 7577 \(2024\)](https://doi.org/10.1038/s41467-024-52084-0) DOI: 10.1038/s41467-024-52084-0
3. *Magnetic anisotropy and GGG substrate stray field in YIG films down to millikelvin temperatures*
R. O. Serha, A. A. Voronov, D. Schmoll, R. Verba, K. O. Levchenko, S. Koraltan, K. Davidková, B. Budinska, Q. Wang, O. V. Dobrovolskiy, M. Urbánek, M. Lindner, T. Reimann, C. Dubs, C. Gonzalez-Ballester, C. Abert, D. Suess, D. A. Bozhko, S. Knauer, A. V. Chumak
[npj Spintronics 2, 29 \(2024\)](https://doi.org/10.1038/s44306-024-00030-7) DOI: 10.1038/s44306-024-00030-7
4. *Nanoscaled Magnonic Networks*
Q. Wang, G. Csaba, R. Verba, A. V. Chumak, P. Pirro
[Phys. Rev. Applied 21, 040503 \(2024\)](https://doi.org/10.1103/PhysRevApplied.21.040503) DOI: 10.1103/PhysRevApplied.21.040503
5. *Roadmap for Unconventional Computing with Nanotechnology*
G. Finocchio, S. Bandyopadhyay, P. Lin, G. Pan, J. J. Yang, R. Tomasello, C. Panagopoulos, M. Carpentieri, V. Puliafito, J. Åkerman, H. Takesue, A. Ranjan Trivedi, S. Mukhopadhyay, K. Roy, V. K. Sangwan, M. C. Hersam, A. Giordano, H. Yang, J. Grollier, K. Camsari, P. McMahon, S. Datta, J. A. Incorvia, J. Friedman, S. Cotozana, F. Ciubotaru, A. V. Chumak, A. J. Naeemi, B. Kumar Kaushik, Y. Zhu, K. Wang, B. Koiller, G. Aguilar, G. Temporão, K. Makasheva, A. Todri-Sanial, J. Hasler, W. Levy, V. Roychowdhury, S. Ganguly, A. Ghosh, D. Rodriguez, S. Sunada, K. Evershor-Sitte, A. Lal, S. Jadhav, M. Di Ventura, Y. Pershin, K. Tatsumura, H. Goto
[Nano Futures 8, 1 \(2024\)](https://doi.org/10.1088/2399-1984/ad299a) DOI: 10.1088/2399-1984/ad299a

6. *Nanoscaled magnon transistor based on stimulated three-magnon splitting*
X. Ge, R. Verba, P. Pirro, A. V. Chumak, Q. Wang
[Appl. Phys. Lett. **124**, 122413 \(2024\)](#) DOI: 10.1063/5.0189619
7. *Offset-free magnetic field sensor based on a standing spin wave*
M. Gattringer, C. Abert, Q. Wang, A. Chumak, and D. Suess
[Phys. Rev. Appl. **20**, 044083 \(2023\)](#) DOI: 10.1103/PhysRevApplied.20.044083
8. *Stimulated amplification of propagating spin waves*
D. Breitbach, M. Schneider, F. Kohl, L. Scheuer, B. Heinz, R. O. Serha, J. Maskill, T. Brächer, B. Lägél, C. Dubs, V. S. Tiberkevich, A. N. Slavin, A. A. Serga, B. Hillebrands, A. V. Chumak, P. Pirro
[Phys. Rev. Lett. **131**, 156701 \(2023\)](#) DOI: 10.1103/PhysRevLett.131.156701
9. *Deeply nonlinear excitation of self-normalized short spin waves*
Q. Wang, R. Verba, B. Heinz, M. Schneider, O. Wojewoda, K. Davidková, K. Levchenko, C. Dubs, N. J. Mauser, M. Urbánek, P. Pirro, A. V. Chumak
[Sci. Adv. **9**, eadg4609 \(2023\)](#) DOI: 10.1126/sciadv.adg4609
10. *Generation of Spin-Wave Pulses by Inverse Design*
S. Casulleras, S. Knauer, Q. Wang, O. Romero-Isart, A. V. Chumak, C. Gonzalez-Ballester
[Phys. Rev. Applied **19**, 064085 \(2023\)](#) DOI: 10.1103/PhysRevApplied.19.064085
11. *Vortex counting and velocimetry at slitted superconducting thin strips*
V. M. Bevez, M. Yu. Mikhailov, B. Budinska, S. Lamb-Camarena, S. O. Shpilinska, A. V. Chumak, M. Urbanek, M. Arndt, W. Lang, O. V. Dobrovolskiy
[Phys. Rev. Applied **19**, 034098 \(2023\)](#) DOI: 10.1103/PhysRevApplied.19.034098
12. *Propagating spin-wave spectroscopy in nanometer-thick YIG films at millikelvin temperatures*
S. Knauer, K. Davidková, D. Schmoll, R. O. Serha, A. Voronov, Q. Wang, R. Verba, O. V. Dobrovolskiy, M. Lindner, T. Reimann, C. Dubs, M. Urbánek, A. V. Chumak
[J. of Appl. Phys. **133**, 143905 \(2023\)](#) DOI: 10.1063/5.0137437
13. *Numerical model for 32-bit magnonic ripple carry adder*
U. Garlando, Q. Wang, O. V. Dobrovolskiy, A. V. Chumak, F. Riente
[IEEE Trans. Emerging Topics in Computing, **1** \(2023\)](#) DOI: 10.1109/TETC.2023.3238581
14. *A micromagnetic-integrated numerical model of spin pumping, based on spin diffusion*
M. Gattringer, C. Abert, F. Bruckner, A. Chumak, D. Suess
[Phys. Rev. B **106**, 024417 \(2022\)](#) DOI: 10.1103/PhysRevB.106.024417
15. *Advances in Magnetism Roadmap on Spin-Wave Computing*
A. V. Chumak, P. Kabos, M. Wu, C. Albert, C. Adelman, A. Adeyeye, J. Åkerman, F. G. Aliev, A. Anane, A. Awad, C. H. Back, A. Barman, G. E. W. Bauer, M. Becherer, E. N. Beginin, V. A. S. V. Bittencourt, Y. M. Blanter, P. Bortolotti, I. Boventer, D. A. Bozhko, S. A. Bunyaev, J. J. Carmiggelt, R. R. Cheenikundil, F. Ciubotaru, S. Cotofana, G. Csaba, O. V. Dobrovolskiy, C. Dubs, M. Elyasi, K. G. Fripp, H. Fulara, I. A. Golovchanskiy, C. Gonzalez-Ballester, P. Graczyk, D. Grundler, P. Gruszecki, G. Gubbiotti, K. Guslienko, A. Haldar, S. Hamdioui, R. Hertel, B. Hillebrands, T. Hioki, A. Houshang, C.-M. Hu, H. Huebl, M. Huth, E. Iacocca, M. B. Jungfleisch, G. N. Kakazei, A. Khitun, R. Khymyn, T. Kikkawa, M. Kläui, O. Klein, J. W. Kłos, S. Knauer, S. Koraltan, M. Kostylev, M. Krawczyk, I. N. Krivorotov, V. V. Kruglyak, D. Lachance-Quirion, S. Ladak, R. Lebrun, Y. Li, M. Lindner, R. Macêdo, S. Mayr, G. A. Melkov, S.

- Mieszczak, Y. Nakamura, H. T. Nembach, A. A. Nikitin, S. A. Nikitov, V. Novosad, J. A. Otalora, Y. Otani, A. Papp, B. Pigeau, P. Pirro, W. Porod, F. Porrati, H. Qin, B. Rana, T. Reimann, F. Riente, O. Romero-Isart, A. Ross, A. V. Sadovnikov, A. R. Safin, E. Saitoh, G. Schmidt, H. Schultheiss, K. Schultheiss, A.A. Serga, S. Sharma, J. M. Shaw, D. Suess, O. Surzhenko, K. Szulc, T. Taniguchi, M. Urbánek, K. Usami, A. B. Ustinov, T. van der Sar, S. van Dijken, V. I. Vasyuchka, R. Verba, S. Viola Kusminskiy, Q. Wang, M. Weides, M. Weiler, S. Wintz, S. P. Wolski, X. Zhang H. Qin,
[IEEE Trans. Magn. 58, 0800172 \(2022\)](#) DOI: 10.1109/TMAG.2022.3149664
16. *Parametric generation of spin waves in nanoscaled magnonic conduits*
B. Heinz, M. Mohseni, A. Lentfert, R. Verba, M. Schneider, B. Lägel, K. Levchenko, T. Brächer, C. Dubs, A. V. Chumak, and P. Pirro
[Phys. Rev. B 105, 144424 \(2022\)](#) DOI: 10.1103/PhysRevB.105.144424
17. *Rising speed limits for fluxons via edge quality improvement in wide MoSi thin films*
B. Budinska, B. Aichner, D. Yu. Vodolazov, M. Yu. Mikhailov, F. Porrati, M. Huth, A. V. Chumak, W. Lang, and O. V. Dobrovolskiy
[Phys. Rev. Applied 17, 034072 \(2022\)](#) DOI: 10.1103/PhysRevApplied.17.034072
18. *Fast long-wavelength exchange spin waves in partially-compensated Ga:YIG*
T. Böttcher, M. Ruhwedel, K. O. Levchenko, Q. Wang, H. L. Chumak, M. A. Popov, I. V. Zavislyak, C. Dubs, O. Surzhenko, B. Hillebrands, A. V. Chumak, P. Pirro
[Appl. Phys. Lett. 120, 102401 \(2022\)](#) DOI: 10.1063/5.0082724
19. *Merging of spin-wave modes in obliquely magnetized circular nanodots*
J. Kharlan, V. Borynskyi, S. A. Bunyaev, P. Bondarenko, O. Salyuk, V. Golub, A. A. Serga, O. V. Dobrovolskiy, A. Chumak, R. Verba, and G. N. Kakazei
[Phys. Rev. B 105, 014407 \(2022\)](#) DOI: 10.1103/PhysRevB.105.014407
20. *Nonreciprocal magnon fluxonics upon ferromagnet/superconductor hybrids*
O. V. Dobrovolskiy and A. V. Chumak
[J. Magn. Magnet. Mater. 543, 168633 \(2022\)](#) DOI: 10.1016/j.jmmm.2021.168633
21. *Control of the Bose-Einstein condensation of magnons by the Spin Hall effect*
M. Schneider, D. Breitbach, R. Serha, Q. Wang, A. A. Serga, A. N. Slavin, V. S. Tiberkevich, B. Heinz, B. Lägel, T. Brächer, C. Dubs, S. Knauer, O. V. Dobrovolskiy, P. Pirro, B. Hillebrands, and A. V. Chumak
[Phys. Rev. Lett. 127, 237203 \(2021\)](#) DOI: 10.1103/PhysRevLett.127.237203
22. *Spin-wave dispersion measurement by variable-gap propagating spin-wave spectroscopy*
M. Vaňatka, K. Szulc, O. Wojewoda, C. Dubs, A. V. Chumak, M. Krawczyk, O. V. Dobrovolskiy, J. W. Kłos, and M. Urbánek
[Phys. Rev. Appl. 16, 054033 \(2021\)](#) DOI: 10.1103/PhysRevApplied.16.054033
23. *Stabilization of a nonlinear bullet coexisting with a Bose-Einstein condensate in a rapidly cooled magnonic system driven by a spin-orbit torque*
M. Schneider, D. Breitbach, R. O. Serha, Q. Wang, M. Mohseni, A. A. Serga, A. N. Slavin, V. S. Tiberkevich, B. Heinz, T. Brächer, B. Lägel, C. Dubs, S. Knauer, O. V. Dobrovolskiy, P. Pirro, B. Hillebrands, and A. V. Chumak
[Phys. Rev. B 104, L140405 \(2021\)](#) DOI: 10.1103/PhysRevB.104.L140405
24. *Tension-free Dirac strings and steered magnetic charges in 3D artificial spin ice*
S. Koraltan, F. Slanovc, F. Bruckner, C. Nisoli, A.V. Chumak, O.V. Dobrovolskiy, C. Abert, and

- D. Suess
[npj Comput Mater 7, 125 \(2021\)](#) DOI: 10.1038/s41524-021-00593-7
25. *The 2021 Magnonics Roadmap*
A. Barman, G. Gubbiotti, S. Ladak, A. O. Adeyeye, M. Krawczyk, J. Gräfe, C. Adelman, S. Cotofana, A. Naeemi, V. I. Vasyuchka, B. Hillebrands, S. A. Nikitov, H. Yu, D. Grundler, A. V. Sadovnikov, A. A. Grachev, S. E. Sheshukova, J.-Y. Duquesne, M. Marangolo, G. Csaba, W. Porod, V. E. Demidov, S. Urazhdin, S. O. Demokritov, E. Albisetti, D. Petti, R. Bertacco, H. Schultheiss, V. V. Kruglyak, V. D. Poimanov, S. Sahoo, J. Sinha, H. Yang, M. Münzenberg, T. Moriyama, S. Mizukami, P. Landeros, R. A. Gallardo, G. Carlotti, J.-V. Kim, R. L. Stamps, R. E. Camley, B. Rana, Y. Otani, W. Yu, T. Yu, G. E. W. Bauer, C. Back, G. S. Uhrig, O. V. Dobrovolskiy, B. Budinska, H. Qin, S. van Dijken, A. V. Chumak, A. Khitun, D. E. Nikonov, I. A. Young, B. W. Zingsem, and M. Winklhofer,
[J. Phys.: Condens. Matter 33, 413001 \(2021\)](#) DOI: 10.1088/1361-648X/abec1a
26. *Inverse-design magnonic devices*
Q. Wang, A. V. Chumak, and P. Pirro
[Nat. Commun. 12, 2636 \(2021\)](#) DOI: 10.1038/s41467-021-22897-4
27. *Spin-wave eigenmodes in direct-write 3D nanovolcanoes*
O. V. Dobrovolskiy, N. R. Vovk, A. V. Bondarenko, S. A. Bunyaev, S. Lamb-Camarena, N. Zenbaa, R. Sachser, S. Barth, K. Y. Guslienko, A. V. Chumak, M. Huth, and G. N. Kakazei
[Appl. Phys. Lett. 118, 132405 \(2021\)](#) DOI: 10.1063/5.0044325
28. *Long-range spin-wave propagation in transversely magnetized nano-scaled conduits*
B. Heinz, Q. Wang, M. Schneider, E. Weiß, A. Lentfert, B. Lägél, T. Brächer, C. Dubs, O. V. Dobrovolskiy, P. Pirro, and A. V. Chumak
[Appl. Phys. Lett. 118, 132406 \(2021\)](#) DOI: 10.1063/5.0045570
29. *Controlling the nonlinear relaxation of quantized propagating magnons in nanodevices*
M. Mohseni, Q. Wang, B. Heinz, M. Kewenig, M. Schneider, F. Kohl, B. Lägél, C. Dubs, A. V. Chumak, and P. Pirro
[Phys. Rev. Lett. 126, 097202 \(2021\)](#) DOI: 10.1103/PhysRevLett.126.097202
30. *Engineered magnetization and exchange stiffness in direct-write Co-Fe nanoelements*
S. A. Bunyaev, B. Budinska, R. Sachser, Q. Wang, K. Levchenko, S. Knauer, A. V. Bondarenko, M. Urbanek, K. Y. Guslienko, A. V. Chumak, M. Huth, G. N. Kakazei, and O. V. Dobrovolskiy
[Appl. Phys. Lett. 118, 022408 \(2021\)](#) DOI: 10.1063/5.0036361
31. *Temperature dependence of spin pinning and spin-wave dispersion in nanoscopic ferromagnetic waveguides*
B. Heinz, Q. Wang, R. Verba, V. I. Vasyuchka, M. Kewenig, P. Pirro, M. Schneider, T. Meyer, B. Lägél, C. Dubs, T. Brächer, O. V. Dobrovolskiy, and A. V. Chumak
[Ukr. J. Phys. 65, 1094 \(2020\)](#) DOI: 10.15407/ujpe65.12.1094
32. *A nonlinear magnonic nano-ring resonator*
Q. Wang, A. Hamadeh, R. Verba, V. Lomakin, M. Mohseni, B. Hillebrands, A. V. Chumak, and P. Pirro
[npj Comput. Mater. 6, 192 \(2020\)](#) DOI: 10.1038/s41524-020-00465-6
33. *Introduction to spin wave computing (Tutorial Article)*
A. Mahmoud, F. Ciubotaru, F. Vanderveken, A. V. Chumak, S. Hamdioui, C. Adelman, and

- S. Cotofana
[J. Appl. Phys. 128, 161101 \(2020\)](#) DOI: 10.1063/5.0019328
34. *A magnonic directional coupler for integrated magnonic half-adders*
Q. Wang, M. Kewenig, M. Schneider, R. Verba, F. Kohl, B. Heinz, M. Geilen, M. Mohseni, B. Lägél, F. Ciubotaru, C. Adelman, C. Dubs, S. D. Cotofana, O. V. Dobrovolskiy, T. Brächer, P. Pirro, and A. V. Chumak,
[Nat. Electronics 3, 765 \(2020\)](#) DOI: 10.1038/s41928-020-00485-6
35. *Spin-wave spectroscopy of individual ferromagnetic nanodisks*
O. V. Dobrovolskiy, S. A. Bunyaev, N. R. Vovk, D. Navas, P. Gruszecki, M. Krawczyk, R. Sachser, M. Huth, A. V. Chumak, K. Y. Guslienko, and G. N. Kakazei
[Nanoscale 12, 21207 \(2020\)](#) DOI: 10.1039/D0NR07015G
36. *Opportunities and challenges for spintronics in the microelectronics industry*
B. Dieny, I. L. Prejbeanu, K. Garello, P. Gambardella, P. Freitas, R. Lehndorff, W. Raberg, U. Ebels, S.O. Demokritov, J. Akerman, A. Deac, P. Pirro, C. Adelman, A. Anane, A. V. Chumak, A. Hirohata, S. Mangin, S. O. Valenzuela, M. Cengiz Onbaşlı, M. d'Aquino, G. Prenat, G. Finocchio, L. Lopez-Díaz, R. Chantrell, O. Chubykalo-Fesenko, and P. Bortolotti
[Nat. Electr. 3, 446 \(2020\)](#) DOI: 10.1038/s41928-020-0461-5
37. *Ultra-fast vortex motion in a direct-write Nb-C superconductor*
O. V. Dobrovolskiy, D. Yu. Vodolazov, F. Porrati, R. Sachser, V. M. Bevz, M. Yu. Mikhailov, A. V. Chumak, and M. Huth
[Nat. Commun. 11, 3291 \(2020\)](#) DOI: 10.1038/s41467-020-16987-y
38. *Propagation of coherent spin-wave packets in individual nanosized yttrium iron garnet magnonic conduits*
B. Heinz, T. Brächer, M. Schneider, Q. Wang, B. Lägél, A. M. Friedel, D. Breitbach, S. Steinert, T. Meyer, M. Kewenig, C. Dubs, P. Pirro, and A. V. Chumak
[Nano Lett. 20, 4220 \(2020\)](#) DOI: 10.1021/acs.nanolett.0c00657
39. *Bose–Einstein condensation of quasiparticles by rapid cooling*
M. Schneider, T. Brächer, D. Breitbach, V. Lauer, P. Pirro, D. A. Bozhko, H. Yu. Musiienko-Shmarova, B. Heinz, Q. Wang, T. Meyer, F. Heussner, S. Keller, E. Th. Papaioannou, B. Lägél, T. Löber, C. Dubs, A. N. Slavin, V. S. Tiberkevich, A. A. Serga, B. Hillebrands, and A. V. Chumak
[Nat. Nanotech. 15, 457 \(2020\)](#) DOI: 10.1038/s41565-020-0671-z
40. *Parametric generation of propagating spin waves in ultrathin yttrium iron garnet waveguides*
M. Mohseni, M. Kewenig, R. Verba, Q. Wang, M. Schneider, B. Heinz, C. Dubs, A. A. Serga, B. Hillebrands, A. V. Chumak, and P. Pirro
[Phys. Status Solidi \(RRL\) 14, 2000011 \(2020\)](#) DOI: 10.1002/pssr.202000011
41. *Magnon-phonon interactions in magnon spintronics (review)*
D. A. Bozhko, V. I. Vasyuchka, A. V. Chumak, and A. A. Serga
[Low Temp. Phys. 46, 383 \(2020\)](#) DOI: 10.1063/10.0000872
42. *Reflection-less width-modulated magnonic crystal*
P. Frey, A. A. Nikitin, D. A. Bozhko, S. A. Bunyaev, G. N. Kakazei, A. V. Ustinov, B. A. Kalinikos, F. Ciubotaru, A. Chumak, Q. Wang, V. Tiberkevich, B. Hillebrands, and A. A. Serga
Physics Communications (in press)
[Commun. Phys. 3, 17 \(2020\)](#) DOI: 10.1038/s42005-020-0281-y

43. *Recent trends in microwave magnetism and superconductivity (review)*
O. V. Prokopenko, D. A. Bozhko, V. S. Tyberkevych, A. V. Chumak, V. I. Vasyuchka, A. A. Serga, O. Dzyapko, R. V. Verba, A. V. Talalaevskij, D. V. Slobodianiuk, Yu. V. Kobljanskyj, V. A. Moiseienko, S. V. Sholom, and V. Yu. Malyshev
[Ukr. J. Phys. 64, 888 \(2019\)](#) DOI: 10.15407/ujpe64.10.888
44. *Nanoscale spin-wave wake-up receiver*
Q. Wang, T. Brächer, M. Mohseni, B. Hillebrands, V. I. Vasyuchka, A. V. Chumak, and P. Pirro
[Appl. Phys. Lett. 115, 092401 \(2019\)](#) DOI: 10.1063/1.5109623
45. *Spin pinning and spin-wave dispersion in nanoscopic ferromagnetic waveguides*
Q. Wang, B. Heinz, R. Verba, M. Kewenig, P. Pirro, M. Schneider, T. Meyer, B. Lägel, C. Dubs, T. Brächer, and A. V. Chumak
[Phys. Rev. Lett. 122, 247202 \(2019\)](#) DOI: 10.1103/PhysRevLett.122
46. *Magnon-Fluxon interaction in a ferromagnet/superconductor heterostructure*
O. V. Dobrovolskiy, R. Sachser, T. Brächer, T. Fischer, V. V. Kruglyak, R. V. Vovk, V. A. Shklovskij, M. Huth, B. Hillebrands, and A. V. Chumak
[Nat. Phys. 15, 477 \(2019\)](#) DOI: 10.1038/s41567-019-0428-5
47. *Direct Observation of Spin Diffusion-Enhanced Non-Adiabatic Spin Torque Effects in Rare-Earth-Doped Permalloy*
P. Krautscheid, R. Reeve, D. Schönke, I. Boventer, A. Conca, A. Chumak, B. Hillebrands, J. Ehrler, J. Osten, J. Fassbender, and M. Kläui
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48. *Spin-wave propagation through a magnonic crystal in a thermal gradient*
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List of Non-Peer-Reviewed Articles

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